

Fishery ecology research is directed toward a more complete understanding of the functional ecology of estuarine habitats such as seagrasses, salt marshes, and mangroves. We are examining the linkages between these habitats and production of commercially important fishes, crabs, and shrimps. This information is used to identify coastal habitats that are essential for maintaining productive fisheries so that these areas can be conserved and protected. We are also conducting research on the ecological value of restored and created habitats and developing design criteria for these habitats to maximize their value for fishery species.

The Galveston Laboratory is perhaps best known for its work on captive-rearing of sea turtles.



Thousands of people visit our rearing and rehabilitation facilities for these protected species each year. Kemp's ridley hatchlings obtained from Mexico and loggerhead hatchlings obtained from Florida are captive-reared for up to two years, used in research, and then released into the Gulf of Mexico. During the period from 1978 to 1997,

23,276 Kemp's ridleys and 1,114 loggerheads were reared, tagged, and released. Tag returns from these releases have been reported from the Gulf of Mexico, the U.S. Atlantic Coast, France. and Morocco. Growth and migration studies of captive-reared turtles indicate that they adapt well to conditions in the wild and are found distributed throughout the natural range of the species. Injured or sick sea turtles found in the wild also are treated and rehabilitated at the laboratory and then released back into the wild. In addition, the laboratory participates in NOAA's Sea Turtle Stranding and Salvage Network and Marine Mammal Stranding Network, and it coordinates efforts with the United States Coast Guard to document concentrations of fishing vessels in relation to sea turtle strandings.

Laboratory scientists have tracked sea turtles using radio, sonic, and satellite transmitters in order to determine their movements, distribution, habitat preferences, diving patterns, and behavior.



Data collected are used in conjunction with a Geographic Information System to determine habitat needs and to assess interactions with